// JOURNAL

OF THE

WASHINGTON ACADEMY OF SCIENCES

VOLUME 33 OCTOBER 15, 1943 No. 10

ETHNOLOGY.—*The last passenger pigeon hunts of the Cornplanter Senecas.*[1]

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"Perhaps again one will say, 'Now once again they are nesting'."

Among the few descendants of the famous old chief still living on the Cornplanter Grant in Warren County, Pa. (Deardorff, 1941), Willie Gordon, inveterate trapper and renowned bear hunter, and Lydia Bucktooth, his neighbor, remember going after squabs to the beechwood groves south of Sheffield where the passenger pigeons (*Ectopistes migratorius*) were last reported to be nesting. Others—Windsor Pierce and Ezra Jacobs—remember hearing the oldsters tell about these expeditions, but they were too young to go along. At Coldspring, above the State Line, is the conservative community of the Allegheny Band of Seneca: Alice White remembers that when she was a little girl her parents joined a party of families that made an expedition to the pigeon roosts at some place below Warren; and Chauncey Johnny John, although born at Cattaraugus Reservation, N. Y., and not so old as some others, had been on several such hunts when quite young. Evidently, among the Seneca such trips to the pigeon roosts were a regular event in the annual round of getting a living.

That this custom comes down from earlier days with every likelihood that it is pre-Columbian is indicated by the narratives of early travelers. Since the passenger pigeon was one of the most abundant birds, if not the most abundant in North America, it is not unreasonable to assume that the Indians had long depended upon its annual return to the nesting grounds, where they procured the squabs in great numbers to supplement their diet; in fact, at this season of the year it seems to have constituted the principal part of the food supply.

EARLY REFERENCES

Netting

The Relations of 1656–57 of the first Jesuit mission to the Onondaga remark how the pigeons gather in the spring at the salt springs adjacent to Onondaga Lake in such numbers that they are taken in nets . . . "that sometimes as many as seven hundred are caught in the course of one morning." (Jesuit Relations, vol. 43, p. 153; see also Le Mercier's Relation of the previous year.) In the Cayuga country, where the game was so plentiful that 1,000 deer were killed in a single season, Father Raffeix (1671), reporting on the Mission of St. Joseph at *Goioguen* [Cayuga], says: "Fish—salmon, as well as eels and other kinds—are as plenty here as at Onnontagué [Onondaga]. Four leagues [12 miles] from here I saw by the side of a river, within a very limited space, eight or ten extremely fine salt springs. Many snares are set there for catching pigeons, from seven to eight hundred being often taken at once." (J. R., vol. 56, p. 49.)

Further evidence that the Onondaga netted passenger pigeons at the famous salt springs is found in Pehr Kalm's monograph (1759), which contains the following description of the activity:

I have also observed that the pigeons have a special fondness for the kind of soil which is

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much mixed with common salt; this soil serves them as food, as a spice to blend with the food, or for its medical properties, I do not know which. At the salt springs of Onondago [*sic*], . . . where the soil is so strongly mixed with salt that the ground during a severe drought becomes entirely covered with it and as white as frost, making it impossible for plants to grow, I noticed with astonishment, in the month of August, 1750, how covetous the pigeons were of this kind of soil. The savages in Onondago had built their huts on the sides of this salt field, and here they had erected sloping nets with a cord attachment leading to the huts where they were sitting; when the pigeons arrived in swarms to eat of this salty soil, the savages pulled the cords, inclosing them in the net, and thus at once secured the entire flock. At certain times, when they come in such numbers that the ground could hardly be seen for them, the savages found it more advisable to use a gun, as by a single discharge of bird-shot they could sometimes kill as many as 50 or more; and this proved a splendid source of food supply. (Kalm, 1912, p. 415. See also "A Bibliography of Peter Kalm's Writings on America," *in* Kalm, 1937, p. 774.)

Although it would appear from these accounts, and one other by Pierre Boucher which follows, that the Iroquois from early times had used nets for taking pigeons, whether their use was learned from the white men remains an open question. Pierre Boucher, in his "true and genuine description of New France" in the seventeenth century, says: "There are birds of another kind called wild pigeons. . . . There are prodigious numbers of them . . . they are to be found everywhere in this country. The Iroquois take them in nets as they fly, sometimes by 300 or 400 at a time."[2]

The two accounts by Boucher and Kalm sound rather as if the Indians originated the idea of netting pigeons, but Mitchell points out that the English colonists of Massachusetts took them in nets about 1660 and had done so for some time previously, according to John Josselyn.

Eye-witness accounts of the Seneca netting and snaring pigeons are scarce, if not lacking, in the literature. Morgan, who worked mainly with Seneca informants at Tonawanda *circa* 1850, says: "Nets of bark and twine were . . . spread for pigeons and quails." And he describes a simple bird snare, formerly much used against blue jays that came for corn, which might have been used on single pigeons with great effect. (Morgan, 1901, vol. 2, p. 24.)

The Cayuga evidently set nets for pigeons on high places. The nets are said to have been made of twine from swamp milkweed fiber, basswood, or slippery-elm bast. The net (*gada'qų'dakwa'*) was spread between two upright sticks, and the netter sat back at some distance holding one end, waiting for a high wind to blow the pigeons into it, when he would pull the net. The folk-tale of "the foolish nephew," in which this information occurs, does not disclose how the netted pigeons were killed, but they were tied in bunches to take home. When the hero and his uncle reached home they plucked the feathers, spitted the birds on sticks, roasted them beside the fire, and dried them for later use.[3]

In later times professional pigeoners set out similar nets without any tripping device on high bluffs along Lake Ontario. That this practice was probably in use among the Cayugas of the region is indicated by their folk-lore and by the authorities already cited.

Raiding Nests for Squabs

Historical accounts of Seneca pigeon hunts sustain the statements of informants that when the squabs were ready to leave the nest the nesting-trees were felled and the fattened squabs were taken by hand and killed and gutted for smoking and drying before packing them home.

The Gilbert Narrative of the sufferings of a Pennsylvania family during their captivity among the Senecas, 1780–83, tells how Benjamin Gilbert, Jr., was adopted into the family of a Seneca chief who settled on Buffalo Creek; and, being considered the "King's" successor, Benjamin was entirely freed from restraint and permitted to go fishing and hunting with his Indian contemporaries. In the spring of 1781—

[2] Montizambert, Edward Louis, *Canada in the seventeenth century. Being a translation of a true and genuine description of New France, by Pierre Boucher.* Paris, 1664, p. 43. Montreal, 1883, *in* Mitchell, 1935, p. 119.

[3] Cook, Elias (Cayuga), "Grand River Reserve (Canada) (1918)," *in* F. W. Waugh, *Iroquois folk-lore* (MS.), Notebook 5, p. 40 ff. National Museum of Canada.

the whole Family moved about six Miles up Lake Erie [near Big Tree] where they staid about two Months to gather their annual Store of Maple Sugar, of which they made a considerable Quantity.

As soon as the Season of this Business was over, they returned to their old Settlement [on Buffalo Creek], where they had not continued long, before an Indian came with an Account that an astonishing Number of young Pigeons might be procured at a certain Place, by falling Trees that were filled with Nests of young, and the Distance was computed to be about fifty Miles: This Information delighted the several Tribes; they speedily joined together, young and old, from different Parts, and with great Assiduity pursued their Expedition, and took Abundance of the young ones, which they dried in the Sun and with Smoke, and filled several Bags which they had taken with them for this Purpose. Benjamin Gilbert was permitted to accompany them on this Excursion, which must have been a curious one for whole Tribes to be engaged in. On this Rarety they lived with extravagance for some Time, faring sumptuously every Day. (Severance, 1904, pp. 115–116.)

It was probably the same hunt that Horatio Jones and his Indian foster parents attended. They had gone down from Niagara and Buffalo Creek to the Allegheny River to visit Cornplanter, his mother's brother, when a runner came in shouting, "*Yu-ak-oo-was, yu-ak-oo-was!*" [*jäh'gowa'son'on*] ("Pigeons, pigeons!") ["Big breads," or passenger pigeons.] He said the birds had roosted in a wood on the Genesee River, about two days' journey above Caneadea village.

All was now bustle and confusion, and every person in the village who could bear the fatigue of travel at once set out for the Genesee. On their arrival at the place designated by the runner, Jones beheld a sight that he never forgot. The pigeons, in numbers too great to estimate, had made their temporary homes in a thick forest. Each tree and branch bore nests on every available spot. The birds had exhausted every species of nesting material in the vicinity, including the small twigs of the trees, and the ground was as bare as though swept with a broom. The eggs were hatching and thousands of squabs filled the nests. Every morning the parent birds rose from the roosts, the noise of their wings sounding like continuous rolls of distant thunder, as flock after flock soared away to obtain food. A little before noon they began to return to feed their young; then arose a deafening chorus of shrill cries as the awkward younglings stood up in the nests with wide open mouths. . . . Soon after noon the old birds departed again to return about sunset, when they came in such dense flocks as to darken the woods. All night long the sound of breaking branches caused by overloading the roosts, and the whirring and fluttering of falling birds trying to regain their foothold, disturbed the usual silence of the forest.

As the annual nesting of the pigeons was a matter of great importance to the Indians, who depended largely [?] on the supply of food thus obtained, runners carried the news to every part of the Seneca country, and the inhabitants singly and in bands, came from as far east as Seneca Lake and as far north as Lake Ontario. Within a few days several hundred men, women, and children gathered in the locality of the pigeon woods. . . .

For their temporary accommodation the people erected . . . huts constructed by setting up two crotched stakes on top of which a pole was laid. Other poles were placed against the ridge, three or four on each side, with the lower ends resting on the ground. One or two poles were then tied across the others parallel with the ridge-pole and to these were fastened long over-lapping sheets of bark forming tent-shaped huts with one open end that was closed at night by curtains of skins and blankets. This form of cabin was easily erected in a short time, and afforded a fair shelter to the occupants during the brief period of their stay.

The Indians cut down the roosting-trees to secure the birds, and each day thousands of squabs were killed. Fires were made in front of the cabins and bunches of the dressed birds were suspended on poles sustained by crotched sticks, to dry in the heat and the smoke. When properly cured they were packed in bags or baskets for transportation to the home towns. It was a festival season . . . and even the meanest dog in camp had his fill of pigeon meat. (Harris, 1903, pp. 449–450.)

No one missed the annual fun at the pigeon roosts if he could possibly get there. That year "forty warriors on their way from Niagara southward, halted . . . for a few days to enjoy the sport and obtain a supply of cured birds for food on their journey" (*ibid.*, p. 450); and there were a dozen or more white captives in the encampment. Marriages were evidently sometimes contracted at the pigeon roosts, for it was at one of these rendezvous near the shores of Seneca Lake, where the Indians assembled annually for days and weeks together, that Sarah Whitmore in 1782, at the time of her proposed marriage to a Mohawk chief, met Horatio Jones, who succeeded his Indian rival. "The young birds were fat and juicy and were devoured in large numbers; while the squaws smoked great quantities of them

for future use. Consequently, with the Indians, the 'Pigeon Roost' was synonymous of a feast and dance, and especially of a council." (Gunn, 1903, p. 517.)

Moreover, on occasion the serious business of a council was set aside so that the people could go after squabs. In May of 1791, while Col. Thomas Proctor was at Buffalo Creek holding councils with the Iroquois, seeking to get some of them to accompany him to the tribes on the Wabash River, the Senecas invited him to watch them gather pigeons:

May 6. Red Jacket and Captain O'Beel came to see me, when the former acquainted me with the reason why no council would be held this day, to wit: That it was their pigeon time, in which the Great Spirit had blessed them with an abundance; and that such was his goodness to the Indians that he never failed sending them season after season, and although it might seem a small matter to me, the Indians will never lose sight of those blessings. This is, therefore, the reason why our men, women, and children, are gone from their towns, but on tomorrow our headmen will return and your business again shall be taken up. 'Tis a matter worthy of observation, that at some convenient distance from every one of the Indian settlements, the pigeons hatch their young in this season of the year, and the trees, which they commonly light on, are low and of the bushy kind, and they are found in such great abundance, that exceeding a hundred nests, a pair of pigeons in each are common to be found in a single tree, so that I have seen in one house, belonging to one family, several large baskets full of dead squabs; these they commonly take when they are just prepared to leave the nests, and as fat as possible for them to be made; when after they are plucked and cleansed a little, they are preserved by smoke and laid by for use. (Proctor, 1896, p. 497.)

Feasts and Festivals

Pigeon time evidently coincided with one of the periodic festivals when the Iroquois invariably returned thanks for an abundant flight of pigeons. Pigeon time came soon after the maple harvest; and it is noteworthy in the modern Seneca Maple Festival, as it is still celebrated toward the end of March at Tonawanda, that Pigeon Dance regularly leads off the social dances (Fenton, 1941).

Likewise, Proctor himself found the Senecas in a festival mood. On the third of May, several days before he witnessed the pigeon hunt, Proctor went out to the Onondaga settlement, three miles east of Buffalo, to honor an invitation to dine with the principal chief of the Onondaga. He remarks how well the women were dressed in silken stroud and ornamented with many silver trappings, and says that the feast "principally consisted of young pigeons, some boiled, some stewed, and the mode of dishing them was, that a hank of six were tied with a deer's sinew around their necks, their bills pointing outwards; they were plucked but of pen feathers [*sic*] [pin-feathers (Ketchum)] there plenty remained; the inside was taken out, but it appeared from the soup made of them, that water had not touched them before. The repast being the best I had seen for a long time, I ate of it very heartily, and the entertainment was given with the appearance of much hospitality." (Proctor, 1896, p. 497.)

The Iroquois apparently considered their own feasts and religious exercises of equal importance with Proctor's business, and between such delays and those caused by the British commandants, Proctor lost an equal amount of time. Cornplanter assembled the chiefs on May 7 to allot planting grounds to tribes and families who had put themselves under the protection of the Six Nations; and the great dance which was performed the next afternoon was presumably the Planting Festival or Seed Dance, which, it appears from Proctor's journal, was then of four days' duration, ending in a general community drunk.

Moreover, the Seneca religiously remember their obligation to the Creator for the things which he annually sends them in abundance by returning thanks in season, and they also pray that this condition shall continue always. In the old days they did not trust to chance to conserve the supply of plants and animals on which they subsisted, but they took some regular precautions to insure their perpetuation. To this day, when they take medicinal plants, tobacco is offered at the first plant of the desired species, which is then left to grow to seed for ensuing years. Deer were not taken at certain seasons; and the Seneca say that they did not molest pigeon hatcheries until the squabs were ready to leave the nests, while the older birds

were allowed to go free. What is more, the Senecas ascribed human qualities to the pigeons, which alone of all the birds nested in communities. It was customary when they took their young to levy among the hunters a collection of gifts such as silver brooches, wampum, and articles of apparel as an offering to propitiate the pigeons. These gifts were borne by a priest to the wood's edge beside the pigeon colony, where he set them down and kindled a small fire. On the embers of this fire he sprinkled sacred tobacco (*Nicotiana rustica* L.), and it is believed that the words of his invocation were carried aloft on the smoke to the Creator and to the spirit-forces of the pigeons, who were ordained to sustain the people living on the earth. His voice alone carried the entreaties of all the people, returning thanks that the pigeons had once more nested near their settlement and making this offering in exchange for the squabs they were about to take; and they prayed that this privilege should continue always. As late as 1896 aged Senecas living at Cattaraugus remembered this custom, which was unknown to our informants, but which is fully illustrated by a series of myths collected by Hewitt that we shall return to later.[4]

Conservation

Religious-minded individuals among the Seneca could feel satisfied that the pigeons, having smelled the tobacco and thinking they had been thanked, would remain well disposed; but there were undoubtedly more practical individuals, like the savages (Onondagas, Oneidas, and Mohawks) who came under Peter Kalm's observation, who made sure the annual pigeon-flock increase was not endangered by pre-season hunting. Kalm says:

> While these birds are hatching their young or while the latter are not yet able to fly, the savages or Indians in North America are in the habit of never shooting or killing them, nor of allowing others to do so, pretending that it would be a great pity on their young, which would in that case have to starve to death. Some of the Frenchmen [presumably those Kalm met in 1749 enroute from the Hudson River to Montreal, when immense flocks of pigeons were encountered] told me that they had set out with the intention of shooting some of them at that season of the year, but that the savages had at first with kindness endeavored to dissuade them from such purpose, and later added threats to their entreaties when the latter were of no avail. (Kalm, 1912, p. 412.)

Archery

Of the ancient Iroquoians, at least the Huron (J.R., vol. 10, p. 143), Seneca, and Cayuga pursued the adult pigeons in the woods and shot them with bow and arrows. In a Cayuga folk-tale, "The Mischievous Uncle and the Boy Wizard," the hero twice shoots a single arrow through a row of pigeons sitting on the same limb, getting a great string of birds both times (Waugh, MS.). The Senecas formerly used bows and arrows to shoot pigeons on the wing, and the great nestings were sometimes the occasion of intertribal archery contests, according to "Antler," an anonymous author who witnessed these trials during the first third of the last century when the Six Nations, as in Proctor's day, were still in possession of Buffalo Creek. Detailed information on how the Iroquois tempered hickory and ashen bows with hot oil, on how bow strings were made, and on the use of blunt-headed arrows in taking birds and small game lends credence to this record. Although in retrospect the immensity of the nesting may be exaggerated, nevertheless the pigeon grounds must have been extensive to cover the townships mentioned and to provide hunting for the several bands of Senecas concentrated there. "Antler" writes:

> During my boyhood days I lived in close proximity to a tribe of Indians of whom I took my first lessons in the use of the bow, and subsequently became much attached to that kind of sport. Partridges, wild pigeons, squirrels and numerous small fry fell victims to my aim. . . .

[4] In 1870 Esquire Johnson, then in his nineties, in an interview with Mrs. Ashur Wright, which Parker, 1923, p. 424, has published, mentioned a tobacco-smoke offering "to propitiate the pigeons when they took their young, the offering of payment to the old ones,—a brass kettle or other little dish full of *ot-go-ah* [wampum], brooches, and various other things which the man who raised the smoke would deposit on the ground before he put the tobacco on the fire, and he says that he left the kettle there when they left home [?], considering it a real payment to the pigeons. . . ." The prayer is said to have been the same as one related elsewhere by Oliver Silverheels, which is lost. (A. C. Parker, p. c.)

The bows which the Indians used in early days (say fifty or sixty years ago) were made of white ash or hickory, worked out of seasoned timber and washed over at different times with hot oil. They became impervious to water and and retained the natural strength and suppleness. However plenty hickory and ash trees may be, there are comparatively few which are of the quality which is required to make a good bow. The strings were made of a single strand of raw hide evenly cut and slightly twisted and made perfectly round by rolling, being about the size of common fence wire and apparently about as hard. Blunt-headed arrows were used for killing birds and small game, and were invariably used among the wild pigeon roosts and nesting grounds.

Among the happiest recollections of these latter days are those that carry me back to boyhood sport among the wild pigeons. Reader, have you ever visited the nesting grounds of wild pigeons? . . . one of the wonders in natural history. The first and most extensive nesting grounds that I visited was in the western part of the State of New York as early as 1823. The nesting began in Cattaraugus County, near the Allegheny River, reaching north to the town of Collins, Erie County, covering a section of country about 30 miles in length and supposed to average 6 miles in width, including a part of all the following towns: South Valley, Coldspring, Napoli, New Albion, Dayton and Towanda [?], most of which have been organized and settled long since the date mentioned. Here was an area estimated at 180 square miles, covered with a thick growth of timber, every tree bearing from one to 50 nests, according to size of top. . . . I enjoyed the satisfaction of rambling through this enormous hatchery. . . . I was a youngster at the time . . . [this was the biggest nesting he recollected]. . . . None but large and extensive forests, with an overabundance of beech mast, could support such a vast body of pigeons during the time of building, hatching and feeding which lasts 6 or 7 weeks, more or less. The building begins about the first of April, or before. . . . The nest consists of a bunch of dry twigs and sticks which seem to be slightly thrown together, yet . . . so strongly and ingeniously connected with the branches that winds and storms cannot dislodge them.

. . . It was seldom that more than one young pigeon was raised on a single nest, but occasionally two were found. During the time of building and hatching, the mast on the hatching grounds would be mostly consumed, consequently the old birds were compelled to forage for long distances to collect food while feeding their young; and . . . [each pair is able to return to its own nest], which is the counterpart of thousands. . . .

Perhaps there is nothing that will draw out a whole tribe of Indians, old and young, like a pigeon hatchery. The flesh of the young wild pigeons is fat and juicy and fine flavored, and doubtless a young pigeon is the sweetest and daintiest morsel that ever tickled an Indian's palate. Here were gathered at different points most of the natives, old and young, from three or four tribes of Indians. Here the best archers from the Buffalo, Cattaraugus, and Alleghany reservations had met for a trial of skill. I am not well posted in the scores of modern times, but it was then and there that I saw greater feats of archery than I ever witnessed before or since.

It seems that the Seneca nation of Indians have wholly or nearly abandoned the use of the bow, save among the small boys.—ANTLER. *Piney Falls, Jan. 13th.* ("Antler," 1880, p. 14.)

CORNPLANTER PIGEON HUNTS

Taken together with the previous historical records, the following narrative accounts of pigeon hunts that live in the memory of old Cornplanter residents assume some importance for local history in western New York and Pennsylvania. It is, however, the wider implication of the facts contained in these narratives that will interest students of Iroquois ethnology, since they demonstrate a continuity of custom coming down from early times to the recent past that broadens our understanding of the economy of these woodland tribes. These accounts, too, illustrate some Indian attitudes toward conservation, revealing a set of values at odds with the "pioneer spirit" of our forebears.

Scouting the Pigeon Nestings

"Early in March or April," said Willie Gordon whose Indian name is *gak'ji'*, "dishful," "we would see the *jäh'gowa*, 'big bread' (passenger pigeon) flying north in flocks so large that their numbers darkened the sky and their wings sounded as thunder. They came as a plague of locusts and devoured every sprouting plant. They would nest in patches of beechwood timber where they flocked to eat the beechnuts."

Informants agree with authorities that the passenger pigeons could be seen going over in March at the end of the sugar season, before the snow was off the ground (Todd, 1940, p. 267).

Under date of April 15, 1822, Joseph Elkinton, first teacher at the Friends' Indian School at Tunesassa (Quaker Bridge, N.Y.), noted in his diary that no pupils showed up for school that day. He supposed they had gone with their parents to hunt pigeons.

School reopened on May 7. It appears that thereafter school was regularly closed for the sugar-making and pigeon season.

People knew that in about two weeks from the time they nested the eggs would hatch, and so the word went about. Lydia Bucktooth, whom Marsh Pierce—"a very bossy man"—used to call *niga'negagi'sa'a*, "little soup," said that there was no particular organization to the hunt at Cornplanter—"one man said to another, 'Let's go,' and he said the same to somebody else; and so everyone went who could possibly go because the pigeon hunt was a good time—just like a fair or picnic."

In the old days decisions regarding movements of the band rested with the chiefs, and group economic activities that involved abandoning the village in large numbers usually followed a decision of the council. And so when the pigeons flew over in March scouts were sent out to follow them to the nesting grounds. These scouts stayed perhaps a month, as it took the pigeons a while to build sketchy nests; two weeks to hatch the young; and then a period for the young to grow. At this point the scouts returned to the chiefs with sample squabs. Estimates were made as to the time when the squabs would be ripe; and then the whole community started. The object was to take the squabs when they were at their best: at the point just before they were ready to leave the nest.[5]

On matters of formality Cornplanter Senecas bow to their neighbors upriver in York State, where the conservative longhouse people of Coldspring keep up the old ways. And in the matter of scouting the pigeon roosts Chauncey Johnny John did not fail us with details. He said: "In spring when the pigeons flew over on their way to *hadinonhgwa'ee'*, their roosts (pigeon nesting grounds) [literally, their habitat], the chiefs would send out scouts to follow them and find out where they alighted. Pigeons made nests in all kinds of trees: the nests were just a few sticks laid together—worse than a crow's nest; they laid one or two eggs.[6] When the nest had been made and the eggs laid and hatched, the scouts would bring back a few samples of the newly hatched squabs to the chiefs, telling them where the pigeons nested. The chiefs would examine the squabs and say, 'two weeks' or 'three weeks'—meaning it would be that long until the squabs were ready to take. During this time the old pigeons would fly away every day to get food. There were so many of them that they soon used up the food about the nesting place; so they would fly off to the fields and particularly to the beechwoods in all directions. Later, when the buckwheat and other seeds sprouted, they would raid the fields."

Windsor Pierce remembers being stationed at the buckwheat fields with a shotgun to shoo away the pigeons, and Willie Gordon said, "As soon as it was discovered where they were nesting, the scouts would pass this way (through Cornplanter) saying, '*Onenh gyon' ai' jäh'gowa dyodinonhgwa'ee'*' (Now they say once again the bigbread [passenger pigeon] is nesting there). People would know immediately when and where to go, because *dyodinonhgwa'ee'*, 'where they are nesting,' or *ganonh'gwaee'*, 'the pigeon nestings,' was back of Sheffield [in Forest County]."

Migration to the Pigeon Grounds

The ancient "pigeon country" for these Seneca was for the most part comprised of the following northern counties of western Pennsylvania: Warren, McKean and Potter, Elk, Cameron, Forest, and northern Jefferson. These were also the old hunting grounds of the Seneca. The watersheds of Tionesta Creek and the Clarion River were familiar to these Indians as favorite deer and bear hunting grounds, and the pigeon nesting mentioned in these accounts were on the high plateaus toward their many

[5] According to Todd (p. 269), the incubation period was two weeks, and the young were ready to leave the nest in another two weeks. "They became very fat and weighed almost as much as the old birds." Cf. Forbush, 1936, pp. 39–46. It is remarkable how well the testimony of these old Senecas stands up in comparison with the facts as established by ornithologists.

[6] This is correct, according to some authorities, although competent ornithologists are inclined to regard one egg per female pigeon as the normal yield per nesting, and the second egg may represent use of the same nest by a second female. (A. Wetmore, p.c.)

heads. The hunt which Willie Gordon describes took place on the site of what is now called Ox-Bow Hunting Camp, south of Byromtown in Forest County, near the heads of Blue Jay and Spring Creek. Now much of the land where pigeons used to nest is cleared for farms or is growing up again in the huge half-million acre timber-farm called Allegheny National Forest. In this region the beech once flourished, and there was a plentiful supply of food for the birds.

Willie Gordon says: "People would come here from Cattaraugus and Coldspring by wagon, and we would go off beyond Sheffield to get the squabs. Families traveled in box-wagons driving teams of oxen or horses, if they had them; and the wagons were heaped high with axes, guns, cooking utensils, and children and with barrels or bark casks for packing the squabs. Some of the families from Cattaraugus [Reservation] would stop overnight 'where the bridge [bank?] is steep' (*dwas'gwanezot*) south of Leon, N. Y. They reached *dyo'neganoo*, 'Coldspring,' the second night, and the combined parties came down the river road to Cornplanter. If they continued from here by wagon, the shortest way leads up the south fork of Hodge Run, 'where the trail comes down' (*djai'nhdon'*), and one climbs up on Quaker Hill and goes down again to Glade, where they crossed over."

Alice White of Coldspring recalls that her family passed "between the rocks" (*degas'-deogen'*) on Quaker Hill, where—according to the Gordons—travelers used to seek shelter returning from Warren.

"When it was time to leave Coldspring," says Chauncey Johnny John, "everybody packed up and went as he could. Some had wagons; most hadn't; so they went down the river in boats or rafts to what they then called Glade (just north of Warren Boro limits). Here they left their boats with people to watch them, and took off for the pigeon country."

Routes to the Pigeon Country

Two main routes led from Cornplanter to this "pigeon country." One went via Kinzua Creek to Dunkle's Corner and Ludlow, where one could take the train to Sheffield. This was the route most commonly used by the walkers. Those who came down from Cornplanter on rafts, or over the hill by wagon, went up Dutchman Run through Clarendon to Sheffield, where the two routes merged at least as far as Barnes.

Willie Gordon outlined two different ways that he followed when he went to the pigeon country:

(*A*) From his home at Cornplanter he crossed the Allegheny and walked to Kinzua, "fish on spear" (*genzo'aa'*), and followed up Kinzua Creek to Dunkle's Corner, thence to Ludlow; from Ludlow he took the Pennsylvania train to Sheffield; on foot from Sheffield to Barnes; then to Brookston, where the big tannery was, and they turned off south west for Watson Farm and on through to Pigeon (which is the name of the post office, but the railroad station is Frosts), and Byromtown. Here they went a mile and a half south into the woods to the site of the present Ox-bow Hunting Camp. Formerly an old Scot named Cunningham lived there. He was a miser, Willie says, and he lived there in a log house and raised some potatoes which he sold to the Indians.

(*B*) From his home at Cornplanter, like the majority of people from higher up the river at Coldspring, he boated down to Glade and walked in. Ascending Dutchman Run, he went to Stoneham where he camped the first night out. From Stoneham he went to Sheffield; and so on by the same route as *A*.

Willie was able accurately to retrace his footsteps, remembering such landmarks as the Brookston tannery and old man Cunningham, the miser, who is also recalled by Mrs. Maggie Frost (74), a native at Pigeon or Frosts, whose recollections of the pigeon nestings checked at every point with Willie's. Lydia Bucktooth had no recollection of the route, but she remembered very well what took place when they reached the camp. Informants agree that they always went to the same place to camp.

Many Coldspring people hunted the same grounds with the Cornplanters; but it appears that others customarily camped several miles away on Blue Jay (*di''di'geh*). Chauncey Johnny John says his party came down the river to Glade (*dedye'hätha'*)

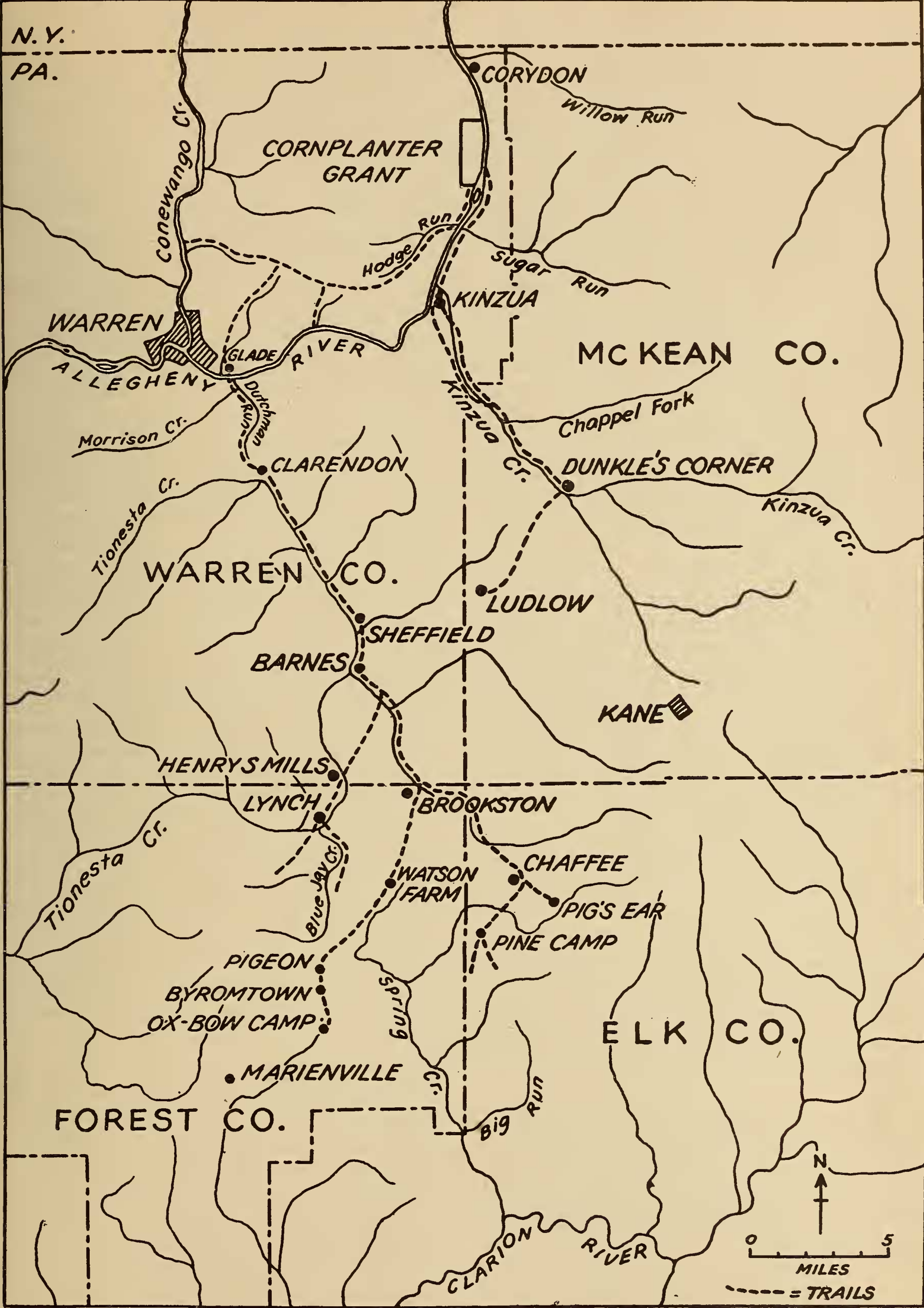

Fig. 1.—Routes to the Cornplanters' pigeon country in northwestern Pennsylvania.

"where they turned off," where the roads to Kinzua and Kane fork. In retracing his steps Chauncey directed us from Clarendon, to Sheffield, to Barnes. There were no Indian names for places enroute because the Indians had never settled there. At Barnes an improved road now turns off to the right, following Tionesta Creek down to Blue Jay and Lynch. It helps Chauncey's story to know that he declined to take this road; and it has since been developed that it was not in existence at the time he passed that way to hunt pigeons. In the old days they turned off farther along, on what is still a dirt road. Chauncey remembered that two or three families of deaf and dumb people lived on the corner of this old road to Henrys Mills, and later we found that the descendants of these people (also deaf and dumb) still live there. From Henrys Mills Chauncey's party had gone down to Lynch, where Blue Jay enters the Tionesta Creek. Near the head of Blue Jay is Pigeon. According to Chauncey, the whole region from Watsontown and Pigeon downhill to Lynch was occupied by pigeon nestings. The Indians camped on Blue Jay flats because, as Chauncey said, "the water was good." He thinks there were not so many nests on top of the hills as there were on the slopes. His locations check with all the stories as to where pigeons nested in these parts.

There were doubtless other routes that were followed to the pigeon nestings, depending on where they had been reported for that year. The trail down the Tionesta from Barnes to Blue Jay followed lower ground than did the route via Watson Farm and Brookston. The road from Lynch to Pigeon was usually muddy. These considerations no doubt also influenced the hunters, the drier trails being preferred in wet seasons.

Another big pigeon nesting ground, according to the whites, was at Pine Camp in Elk County, which could be reached by following the road from Barnes through Brookston to Chaffee and on into the woods about Pig's Ear.

Organization of the Hunt

To say that the Seneca pigeon-hunting expeditions were formally organized affairs would be an overstatement, for they do not assume the formal aspects of the Buffalo hunts of the Plains Indians. Yet, individualistic as the Senecas are, one can observe in their behavior together a tendency to repeat year after year certain traditional ways of behaving, which become set forms observable as definite cultural patterns. People got to the pigeon nestings any way they could, as we have seen: Some boated down the river and walked in, others went in wagons, and still others went via Kinzua and Ludlow and took the train to Sheffield, walking the rest of the way. Most just went. Nevertheless, once they got together at the camping grounds, an organization came into being.

The hunting party from each locality was sometimes in charge of a leader or headman whom the families had appointed for the duration of the hunt. He was selected for qualities of character and leadership: he must be a speaker (*haiwano'ta'*), one who knows how to address an assembly, and he must be a sober man to whom the people look up. His duties were to order the line of march, arranging the camp each night on the road by assigning camping sites to the families of his band. Every morning, according to Alice White, before they broke camp the leader would preach to the people: First he returned thanks to our Maker for all living things on earth and upward toward the sky-world, and then he asked for good luck on the day's journey. Then he urged the people to keep order. Again at night when they had retired he would preach to the camp, exhorting the adults to avoid recrimination and sin and urging the children to behave. Thus the Indians camped along the way; they were in no hurry to get there.

This tendency of the Iroquois peoples whenever they are gathered in a group inevitably to select a speaker, who always behaves in this traditional way that is expected of him, is what is meant by "observable cultural patterns." In this sense the hunts were organized affairs.

The following incident related by Lydia Bucktooth of Cornplanter as to what prompted her family to join the hunters at the nesting grounds on one occasion illus-

trates their spontaneity. Lydia first went with her parents when she was 6 or 7. Her mother had been sick (she died when she was 52), and her father said when word came that the pigeons were nesting, "Come on, you might as well go along and see this once before you die." Although she was sick, she went anyway. They canoed down to Glade; then they traveled over the hills—there was no road—taking a short-cut to a place back of Sheffield, to the "place where the pigeons were nesting" (*djoditnonhgwa'iee*). (Lydia said that this term, which literally means "the place of their habitation or residence," hence "roost," means the whole pigeon-roost or nesting grounds.)

The Camp: Lean-tos

When they arrived at the nesting grounds lots of people were there, both white and red. Lydia's family made a camp for themselves which she described in some detail. It was a lean-to, closed on three sides and open only in front. It rested on posts, with hemlock boughs laid on for a roof. She did not say whether the posts were crotched to support a ridge pole on which the rafters were presumably laid. The fire was built out in front. As far back under the side as possible a pile of hemlock boughs several feet thick was laid as a bed, on which they slept. (Lydia does not say whether they slept with heads, sides, or feet toward the fire, but the last seems to have been the usual orientation.) They stayed several weeks; and sleeping under the lean-to on a hemlock bed did her mother so much good that "it cured her of consumption."

Indians who came every year to the vicinity of Bells Run near Ceres, N. Y., to hunt in the spring and to make splint baskets, "would build wigwams of hemlock bark, which were too low for them to stand up in, but which afforded them a comparatively comfortable place to sleep, into which they could crawl in time of storm. They built their fires close to the opening, and slept with their feet to it . . . [on] . . . hemlock boughs, . . . rolled up in blankets . . . " (Mann and King, 1896, p. 144). As early as 1805 John Lyman had encountered, in May, a party of 30 Senecas from Allegany Reservation encamped upon the abandoned site of a town near the mouth of Trout Run, 7 miles below Coudersport, Pa. This was during the pigeon nesting season (French, 1919, p. 23).

People returned year after year to the same camping sites. If there was any preemption of hunting grounds, in the sense that the Senecas of Tonawanda used to blaze witness trees to mark off a sector of the sugar grove which a given family had preempted for that year, it was rather of camp sites than of pigeon trees. This is, of course, only natural, as the trees were cut down to get the pigeons. Since, however, families returned year after year to the same sites, the younger men had to go farther down to new sites as they came along. On arriving they built themselves lean-tos in the manner already described (C. J. John). As the season advanced, the pigeons moved gradually farther north. It appears that only the young men and those older men who were themselves professional pigeon-catchers or who were employed by white professionals followed them as they moved out of range of the original band camp site.

When a large party under the guidance of a headman or leader arrived where the pigeons had been reported nesting, the leader instructed his party how to conduct themselves at the nesting ground. The hunting camp, as Willie Gordon remembers it, was a clearing enclosed by open-face shanties or lean-tos that were covered with a deep thatch of hemlock boughs. He said that a steep roof with lots of boughs would turn a heavy rain. In these shelters individuals bedded down for the night on hemlock boughs or bracken ferns, which gave off a stimulating aroma.

Informants agree that there were two camps. All the Cornplanter people lived together in one—"on one side of the fire," as the Iroquois say; and some of the Coldspring and Cattaraugus people occupied the opposite side. Thus the camp was divided in two by locality as well as by religion, for the Cornplanter people were then Christians; but the Coldspring and Cattaraugus campers were followers of Handsome Lake, the prophet, and were therefore so-called

"pagans." Between the two camps a platform of stones was built for the use of the "speaker" who roused the camp at daybreak.

Someone was appointed to go to each shelter early every morning to inquire whether everyone was well. The runner for the chief or "speaker," as is customary in Iroquois society, then came back and reported to the "speaker," who stood up on the stone platform and returned thanks to the Creator for keeping all well during the night and asked for good luck during the day's hunt. "He returned thanks for every thing all the way from the ground up to the sky." The same people officiated for both camps.

"I can remember," Willie Gordon related "how the 'speaker' used to arise before daylight and preach every morning while we were at the pigeon camp. He returned thanks that everyone was well and asked for protection and good luck during the day of hunting, and then he chanted our thanks to our Maker with the prayer they call *ganon'yonk*." This is the regular Seneca prayer of thanksgiving for all things from the earth upward to heaven that the Creator ordained for man's sustenance and improvement. "This chant always reminded me of the baying of a hound, because the speaker would begin each article with—*Da'onen di' oya''ko* ('And so now then another thing')—and continue on a high note to the end of that subject, when his voice would fall. Then, having finished the whole prayer, he would charge the people to be honest: he would say the worst thing for a man to do is to drink. 'Be careful not to use liquor or to sin while on this hunt!' Then he would tell the old people to stay in camp and watch the little children so that they did not stray into the woods and get lost."

Hunting Techniques

As soon as they had eaten, they all went out, both camps working together during the day. There was no particular organization to the hunt; everybody was for himself. Individual families worked for themselves, and there was no such thing as sharing the kill. The Indians were interested only in the squabs, and to get them the men cut down the beech and hickory trees about 6 inches in diameter, according to Willie Gordon, so that the women and children could raid the nests. When a tree fell, the men, women, and children scuttled about picking up the squabs out of the bushes. They were killed by knocking them on the head with a stick, by pinching the heads at the temples between thumb and forefinger, or by wringing their necks.[7]

The squabs were at once cropped and gutted, and a little salt was put on them. Willie Gordon emphasized the need of cleaning the squabs immediately: "We would open them and take out the 'innards' and crop, for the meat smells badly if the crop is left." However, the squabs were not plucked of feathers then or later. They were carried back home with the feathers on. The weather was usually cold enough so they would keep; but, to repeat, the crops had to be taken out at once or the meat would spoil.

Many of the squabs were eaten at the camp; but large quantities were packed for transportation to the homes. In later years there were increasing numbers of white buyers who took, sometimes, the whole catch.

The hunters lived principally on squabs that they had caught. These were boiled, after the women had picked them clean of feathers; but those to be taken home were salted and roasted until dry before the fire, or boiled and smoked in strips as fish. Here our informant illustrated with his hands how the meat was cut into strips. Others do not recall that pigeons were smoked. Perhaps this reflects only a failing interest in

[7] Biting the head just back of the eyes was the approved method of killing the catch among professional netters both in Ontario and Pennsylvania. (Mitchell, 1935, p. 124; French, 1919, pp. 82, 102.) However, it is possible that this trait was adapted from Indians. The western Eskimos bite the necks of auklets when netting them (Dr. Henry B. Collins, Jr., *conversation*), and this seems to be a widespread trait among the Eskimo as far east as Greenland. How much farther it extends is uncertain. French (opp. p. 152) illustrates pincers that were invented and patented by James V. Bennett to reduce such "cruelty at the wholesale butcheries to a minimum."—W. N. F.

preserving them in quantity. The hunters grew fat on squabs and squab grease spread on potatoes, which they bought from Cunningham, the white man.

Each family strove to fill as many as possible of the barrels they had brought, and when they returned to settlements such as Coldspring and Cattaraugus the families who had not gone on the hunt begged to buy squabs of those who had made the trip to the pigeon roosts. Willie Gordon said: "A long time ago the Senecas salted the squabs like pork in casks of elm bark which they made, or in big stone crocks which they had obtained in trade.[8] Each family worked for itself. Leaders of the hunt got nothing extra for their efforts."

An extract from the personal correspondence of Jesse Cornplanter of Tonawanda Reservation, N. Y., summarizes and confirms the statements of other informants. Although Jesse is too young to have gone out from Cattaraugus to hunt squabs, his statement is an interesting example of how such knowledge persists among the Iroquois long after a custom is dead.

I will tell you this much about this matter. My mother [deceased] had the good fortune to be born early enough to have gone with this hunt for squabs in her childhood, but she recalled clearly what they did. She said that they had some scouts that they sent out before the pigeons starts to nest or hatch their young; these scouts had to report back to the village, and then when the time came, they all would start out in wagons with empty barrels. They would travel all day and then would camp for the night. They used to go to some place around Kinzua, Pa., in the big hardwood forest. They had one Head Man who had full charge when en-route, [and] they would all gather every morning for a speech of thanks and ask for blessing and luck in their venture. When they arrived at the spot, which seems to have been in the hills or young mountains of the Alleghenies, it would be all of beeches. The limbs would be just covered with the nests of these pigeons, (she said it looks like a crows nest—just a few sticks), and there would be three or four squabs [others say two] in each nest. Then they would cut the trees down and as the tree falls, then the children and women did gather the squabs, and they would gut it and then salt it and put it in layers in the barrels. She never saw them smoked as your version says . . .

[8] Salting for winter use is a trait that was acquired early from the white settlers (Mitchell, 1935, p. 107).

In the evenings each camp had its own doings. The Cornplanters were at this time pretty much Christian; so they sang hymns, prayed, and listened to preaching. The preacher at that time was John Jacobs Esquire, and he was always called Esquire to distinguish him: it was as much part of his name as the rest. Over in the Coldspring camp, where the Handsome Lake followers were quartered, they would sing and dance and have preaching according to their own custom. Willie Gordon never went to see it, as—he says—he was at that time "full of religion" (Christianity); and he stayed away. Lydia Bucktooth was too small, and Chauncey Johnny John, who would know, remembers no ceremonies attached to the hunt, and said there was no connection between hunting pigeons and the Pigeon Dance, that he had ever heard of. "It is just another animal dance with nonsense words." Willie said even John Jacobs Esquire could not see any harm in what was done in the morning—the thanksgiving to all the spirit-forces; but in the evening the two camps did not mix.

This activity continued for two or three weeks, often longer. "After the squabs got so big that they would fly when the trees were felled, we would leave that place and go somewhere else," said Willie Gordon. As the pigeon nests were destroyed they would move ahead and build others. The younger people would follow the pigeons for a long time, runners going on ahead and reporting back to the chiefs, as we shall see below. The pigeons roosted all over that country. The forest was mostly beech, but Willie pointed out stands of "pigeon cherry" (*Prunus pennsylvanica* L.f.) (*ganondjo"gwanɛ'*) from which the Senecas took pitch for burns. It is notable that some of the finest stands of cherry anywhere are yet in this forest. Unlike Chauncey Johnny John, Willie and Lydia say the pigeons nested mostly on the plateau and they had no recollection of finding them in the Blue Jay and Spring Creek Valleys at all.

THE PIGEON IN SENECA FOLKLORE

Several legends involving the passenger pigeon were formerly current among the Senecas. Our informants neither knew how

their ancestors acquired the technique of hunting pigeons nor did they connect this activity with the beginnings of the Pigeon Dance, of whose origin they are ignorant. Moreover, the few published myths have been overlooked by historians among ornithologists, who are more or less unfamiliar with the literature of American Indian folklore. Mitchell (p. 17), after considerable search, found only three stories—two Huron and one Neutral; and thought it strange that such legends should be so scarce, and somewhat unnatural that this amazingly spectacular creature was not more closely linked with the folklore of the Indians, who were ordinarily acute naturalists. But, as we shall see, these birds were more than a source of provender. Among the Seneca, at least, folk-tales furnish answers to our questions concerning the introduction of hunting, the origin of the pigeon songs and dance, the nature of the invocation at the ceremony for propitiating the pigeons, and the sacred character of albino or white pigeons.

Taboo on Taking Albino Pigeons

The white or albino pigeon, like the "white crow," was considered sacred because "he was the headman" or "chief of the pigeons." "Never disturb him, and never cut down a tree in which a white pigeon has nested," said Chauncey Johnny John. Ascription of supernatural power to white animals pervades Seneca mythology: witness the magic white beaver, the white otter, the white dog sacrifice, etc. It is well known that albino bison were considered sacred among the Plains Indians. None of our informants recalls seeing such a white passenger pigeon. For further information we turn back a generation to the Cattaraugus informants of Curtin and Hewitt.

Pigeon Hunting in Mythology

A tendency for a folk to project their daily activities into ancient times is a constant characteristic of mythology. As the myths themselves sometimes survive the projected activity, they become a source of information on the former culture of the folk. This is precisely the case with pigeon hunting. A Seneca myth purporting to be the origin of the porcupine people, a clan not present among the Seneca, refers to an ancient time when the Iroquoians were apparently a single nation of hunters and gatherers. As they became numerous, the game became so scarce that it was necessary for the tribe to divide. This decision was made in public assembly, which guaranteed to each band of maternal kindred (*ohwachira*) its own hunting territory. Subsequently, internecine warfare arose out of attempts to punish trespassers. Now, the porcupine people of this myth are said to be the descendants of one Wendat (Huron) woman, the matron of one of these separated bands. In this account of the yearly cycle of their economy, one sees projected the fundamental patterns around which later Seneca economy was organized as recently as the pigeon hunts we have described.

The porcupine people knew where to gather nuts, berries, and small fruits, and they also knew just where the wild pigeons had their roosts.

> They noted the whereabouts of these places, and when the season was fully come their leaders and chiefs would call to their people in a loud voice: "Come! Let us go to feed ourselves abundantly where the wild pigeons have now prepared their roosts for the purpose of breeding." At this time the wild pigeons were so numerous that many flocks stretched over large tracts of territory darkening the light of the sun and making with their wings a loud rushing sound resembling that of an approaching tornado. Giving heed to the call of their leaders, the people would make the necessary preparations to go to the roosts of the wild pigeon. Having reached the designated place, the people quickly put up temporary camps and then went out at once to kill the squabs, which they brought to their lodges to broil and eat with boiled corn bread and corn soup. All were delighted with the bounty of nature—the gift of the Master of Life.
>
> Having thus spent part of the summer killing wild pigeons, after the birds had departed, a leader among the people would say: "Oh! friends, cousins and kindred, the deer people have now gone in this direction and are now fat and in good condition to be killed for food and for their skins. Let us decamp now and go the place where they may be found. Up and let us be going. Let us lose no time in delay." So, leaving the grounds of the pigeon roosts early in autumn, they would journey to the land where the deer were accustomed to feed and raise their young. (Curtin and Hewitt, 1918, pp. 654–656.)

White Pigeon, Chief of the Pigeons

Seneca story-tellers depicted the white pigeon as chief of the pigeons who live as people in colonies and hold councils. The decision of the council of birds is revealed to an old man in a vision while on a solitary hunt. The pigeons offer their young for the support of man and decree rules for conducting the hunt. This supports the contention of Coldspring informants that a master of the hunt governed the conduct enroute to the pigeon grounds. The pigeons entered into a contract with mankind: in return for their young they expected an offering and invocation with tobacco smoke. Violations led to misfortunes among the hunters.

This is the story of the White Pigeon, the chief of the pigeons (after Curtin and Hewitt, 1918, pp. 694–696):

[*White pigeon chief of colonies*]

It is said that among the wild pigeons the white ones are the chiefs of their communities. According to tradition, a white pigeon once flew into the forest lodge of a noted man, the Wild Cat. The visitor did not appear ill at ease but stood in the lodge wherever it seemed good to him, and then without remark he flew away.

The old man, Wild Cat, somewhat amazed by this quiet conduct of his visitor, related the incident to his neighbors, saying that this visit portended . . . something out of the ordinary. . . . But an entire year passed and nothing unusual happened to old Wild Cat. . .

[*Council of birds: Pigeons ordained for man*]

But at about the same season the next year the same White Pigeon again visited the old man's lodge. At this visit the old man believed that the White Pigeon was a man . . . , so he conversed with him. . . . White Pigeon informed the old man . . . that all the various tribes of birds had held council . . . [and]. . . had decided that the wild pigeons should furnish a tribute to mankind, because their Maker had selected the wild pigeons for this important duty . . . other birds had only very little to give . . . because . . . [they lived] dispersed here and there, and . . . could be obtained only with difficulty, while the others had nothing to offer toward the support of mankind.

[*Taking squabs*]

So, being the only tribe of birds which built their nests and reared their young in a single community, it was resolved by the various tribes of birds that the pigeons should spare some of their young men for food. White Pigeon continued by saying that he had come purposely to notify old man Wild Cat of this . . . decision, and tell him *the young pigeons* were to be taken in proper season, and the manner in which this must be done.

[*Master of hunt: Places "pole across path"*]

He said: "In the season of the roost, when the young pigeons have attained a suitable size for eating, the people should select a suitable person as superintendent or *master of the hunt*, and he should give the essential directions to the people for . . . [preparing] . . . for the hunt before starting for the hunting grounds where the pigeons have their roosts in the forest."

On such a hunting expedition the entire community was engaged, and so it was not unusual to have a very large crowd of people moving along a common path at this time. However, to secure order and obedience certain rules for the march must be observed by all. . . . When the party halted to rest, to eat, or to camp, for the night, the leader would place a rod, suitably painted, across the path, and no one was permitted to pass over it or to go around it for the purpose of continuing the journey regardless of the rest of the party. It was held that should one break this injunction some misfortune would inevitably befall the party. When the party was ready to proceed the leader would take up the rod and then the journey would be resumed.

[*Offering to pigeons*]

Upon nearing the roosting place of the pigeons it was customary to make a collection of gifts from the people, consisting of various articles of ornament and trinkets of all kinds, for an offering to the pigeons. These . . . gifts were placed in a bark bowl and this was borne . . . into the forest to some swampy place where the tall weeds were plentiful, and these gifts were spread out on a piece of elm bark while native tobacco was burned and an invocation . . . was made to the pigeons and their Maker.

Tradition reports that for the first hunting expedition the people . . . did not observe the rules of the master of the hunt, . . . some went around the painted rod . . . others withheld presents . . . and many accidents happened to them: some broke their legs, others their arms, some fell sick, and some died. . . .

Killing both young and old pigeons at any season is by implication proscribed.

The Song of the Pigeons

The white pigeon as chief and elder of the Pigeon Tribe discloses their songs and dance to a pure man who has a vision at the nesting grounds in another tale which Hewitt obtained in 1896 from Joshua Buck (Onondaga) (BAE MS. No. 2883) of Grand River, Canada; and published with the Curtin col-

lection (pp. 663–666). The original text is in Onondaga, Buck's native tongue. He called the story *Djo'hä Hodiênna'*, "The Song of the Pigeons."

[*Families had separate camps*]

These birds had formed a nesting place. . . . Having received knowledge . . . a great number of men, women, and children, starting from their villages, went to the place where the pigeons formed their roosts . . . arrived . . . they at once began to build their temporary camps according to their *ohwachiras* [maternal families] and clans and kindred.

[*Puberty vision quest*]

. . . A man who had just reached . . . puberty and had no evil habits went with this crowd of people. . . . He was a very good person . . . they began to travel from place to place through the roost to kill such pigeons as they needed. At this time the upright young man heard the tumult arising from the cries of pigeons (conversing) together and he also saw the pigeons in vast numbers wheeling in circles.

Suddenly . . . greatly surprised to see flying among the pigeons one white in color . . . As he watched . . . the white pigeon left the others and alighted . . . nearby. At once the pigeon began to speak, saying: "Understand that we have selected you to tell your people what . . . we desire . . . most . . . You must tell your chief that we do not like to have so many among you in this place who do not remember Him who has created us. [Our Maker.] There are many who think only evil things to please themselves. We wish that they who have evil thoughts should put away evil desires, and we believe that whoever does not do so will suffer some grave misfortune.

[*Thanksgiving morning and night*]

"We further wish you and your people to join us in daily returning thanksgiving when each morning and evening shall return to us. We think this profitable. . . . You see us when the morning comes making a great tumult, and you hear us all talking while we circle around the place in which we have our roost. The reason for this behavior is . . . we are offering thanksgivings to Him who has created our bodies. In the evening this takes place again . . . and you see us then circling around our roosting place, and you hear the accompanying sound and confusion of voices. Now, understand, we are going through the ceremony of the dance, and we are singing. This signifies that we are happy; we are full of joy.

"We have no protest to make against your coming to this place to obtain the young whose bodies resemble ours. Indeed, you wish that these [offspring] shall become a source of satisfaction [subsistence] . . . we have only the kindest of feelings toward you in this pursuit of your desires. You must know, too, that Our Maker has ordained that this our flesh shall be for the welfare and contentment of human beings dwelling on the earth.

[*Pigeon dance and tobacco offering*]

"You must understand further that I, at whom you are looking—I who am speaking to you, am indeed the oldest person among my people, and it is on account of my great age that they have chosen me to come to you and tell you our wishes and to teach you our songs. You, too, are able to sing them. It is essential that you should enjoy yourselves; that you shall dance in order to do this; and that all your people who are here shall take part. In dancing you shall make circuits around the places where you have kindled your fires. When you have finished the singing and dancing you shall go with your chief to make an offering of tobacco at the very border of our encampment [roost], where you two shall stand to perform this ceremony. When you have kindled a fire you shall cast native tobacco on it, and while thus occupied you must pray our Creator to permit you and your people to pass the period of your stay here in health and prosperity. At that time, your chief, too, shall cast something on the fire—things of which you make daily use, and these objects shall become the token or message of the people. Furthermore, we together, you and my people, must unite in performing this ceremony, and we must also be of one accord when we make this prayer and request of the Creator of our bodies. Now it is for you to return to your people and tell them fully what I have said to you. This is what I have to say."

Then the upright young man replied to his pigeon friend: "Your proposition is agreeable to me, and I will fulfill my duty . . . by telling my people all that you have said to me."

[*Youth learns songs*]

Without speaking further the white pigeon . . . flew away. The young man, while watching it fly off, saw a large number of pigeons moving in a circle as they flew along; and he heard the birds sing, making a very loud song, a tumult of voices. He listened very attentively and for a long time and finally learned the songs which the pigeons were singing so loudly. Then he returned to his lodge and his own fireside.

[*Youth relates vision to clan chief who carries out contract with the supernaturals*]

At once he related in every detail all the white pigeon had said to him. A messenger was sent for the chief of his clan, and when he arrived the upright young man again repeated all that the white pigeon had said to him concerning the duties of the people who were there to hunt squabs. When the chief had heard . . . he at once said: "Let us at once do as the white pigeon has proposed. Let someone be detailed to make a collection of offerings, and then we shall proceed with the re-

mainder of the ceremony." Certain headmen were detailed to make the collection of offerings. Going from lodge to lodge, they collected various articles presented to them as offerings in the ceremony. Some gave wristlets, some bracelets, some necklaces, while others contributed articles of dress, moccasins, and tobacco of the native variety. When they had visited all the lodges they returned to the lodge of the upright young man, where he and their chief awaited them.

[*Offering to pigeons*]

After they had properly arranged the offerings the chief said: "Let us start now; we will go toward the place which borders on the pigeon roost or nesting place." Then they two started, the chief and the upright young man. When they reached the border of the pigeon roost they kindled there a very small fire, and the young man made an offering of native tobacco by casting it into the fire, at the same time asking the Creator for health and welfare and contentment for all the people while they were at that place. His prayer was long and earnest, and when he ceased his invocation the chief stepped forward to begin his prayer. Bringing all the articles which had been offered and standing before the fire, he said in prayer: "Thou who hast created our bodies, here lie all those things by which we support our message (by which we support its head), all the words of our prayer. We offer these to Thee. Accept them as a testimony of our faith." Then he laid all the objects which he had brought near the fire. Thereupon the two men returned to the lodge of the upright young man.

[*People called to repent, and to learn new dance*]

When there they went at once from lodge to lodge to call a council of the people. As soon as the people had come together and had seated themselves according to their families and clans the chief arose and addressed them. He urged them to repent of their evil deeds . . . and to offer . . . thanksgivings to their Creator in the morning and also in the evening. . . . When he had finished his address on the need of observing faithfully the things which had been taught them by the Pigeon people, he said: "Now let us severally give thanksgivings to the Creator of our bodies, and moreover we will dance to the songs of the Pigeon people. Every person should take part in this ceremony."

[*Two leaders lead whirling column of pigeon dancers*]

Thereupon the upright young man and the chief took their stations at the head of the line of dancers. When all were in line and ready the young man began to sing the songs of the pigeons, and all danced following their leaders. In dancing they made a circuit of the lodges, moving slowly to the rhythm of the songs as they turned from the right toward the left. When the young man had sung all the songs the young man had reached the point of departure.

[*Explanatory elements: Counter-clockwise movement of social dances*]

Then the chief, addressing the people, said: "We have now, indeed, performed this ceremony as it has been taught to us by the people of the pigeons; and when we shall depart from this place we must take back with us this ceremony, which will be of great benefit to us. We have learned these songs here from a superior people, and so we must cherish this ceremony. We have learned, too, that in dancing we must always make the circuit of the fires in one direction: namely, from the right to the left. The reason for this is that you use your right hands either to seize or to release whatever you wish, so it is necessary that the right side at all times be on the outside of the circle of dancers, and that the part of the body in which lies our life shall at all times be on the inside of the line of dancers. Let us now make ready to start for our homes." With loud shouts of approval and of exuberance or joy the dancers returned to their lodges to make preparations to depart for their homes.

RELATIONS WITH WHITE PIGEONERS: NETTING

Our informants emphatically stated that Seneca Indians never took the old pigeons, which they deemed inferior as food, for their own account; and that they never knew Indians to shoot into the trees with shotguns to slaughter the roosting old pigeons wholesale as did the whites; but many Indians did work for the numerous white pigeoners who used these practices as well as nets. Chauncey Johnny John remembers big nets that covered the whole tree and recalls that some Indians did as the white people and set up nets on posts, into which the pigeons flew and fell down. That, however, was when Indians were selling to the white people. This is interesting in view of Morgan's statement already cited and the evidence of Cayuga folklore. The Rochester Museum has two pigeon nets and a stool-pigeon stool which came from the neighborhood of Irving, adjacent to Cattaraugus Indian Reservation (Seneca). They are indubitably quite old (A. C. Parker, p.c.), but there is no assurance that they were made and used by Indians.

The U. S. National Museum has a passenger pigeon trapping outfit consisting of net, releaser pole, and pigeon baskets for transporting live pigeons that was used by white commercial trappers. It was contributed by Courtenay Brandreth, of Ossin-

ing, N. Y., through Dr. A. K. Fisher (Division of Ethnology, *Acc. No.* 100939: A. Wetmore, Assistant Secretary, p.c.). According to Mr. Brandreth, the equipment belonged to Tot Acker, of Sing Sing, N. Y.

The net was used in southeastern New York by white people, and I think the technique they used came from Europe. . . . The nets were laid flat on the ground a few feet apart. The spaces between them were baited [with salt or corn], and the nets were sprung inward. A live pigeon was tied to the hover and it was raised up and down to simulate a bird lighting. Also, live birds had their eyelids sewn together and were thrown into the air and pulled down with a string for the same effect. I think you will find needles and thread still in the decoy basket. (Courtenay Brandreth, p.c. 11/24/1942.)

Such devices were widely employed by professional trappers, or catchers, as they were usually called. Willie Gordon described how, when working with professionals, the Indians would clear all leaves from a piece of ground; bait it with salted corn; and put up a very large net, either suspended from trees or tied down to saplings. The hired Indians hid in the bushes until the ground was covered with feeding old birds to pull the "trigger" and release the net, which would envelop the pigeons. This description is not unlike that of Peter Kalm's observations of hunting practice among the Onondaga, and it seems unlikely that the Seneca had not tried netting birds at an earlier time.

White men were usually present among the Indians to buy all the squabs that were for sale. Lydia Bucktooth's family went just for a good time, with the idea of selling all the squabs they caught to white buyers. Lydia said that if there was any way to bring the squabs home people would do it, of course; but many had all they could do to get home themselves with their axes, kettles, and camping paraphernalia. She thinks not many squabs were brought back from the hunt. Alice White, whose people went in an ox-cart, says that her father brought back barrels filled with squabs, most of which were at once given away to the old people who had not been able to go on the hunt. Many Indians, no doubt, did as Willie Gordon who says he carried home as many dressed squabs as he could pack into ash-splint carrying baskets suspended from a burden strap or tump line, passing across the chest and shoulders, or forehead, to the back. A carrying basket filled with dressed squabs was a pretty heavy load.

Indians hunted side by side with professional pigeon hunters for many years. Competition gradually sharpened. The pigeons were disappearing, and large timber acreage was destroyed. As the railroads entered the pigeon country—which was also the timber country—public opinion was stirred against the waste of both. The year 1868 is said to have seen the last great nesting on New York soil, at Bells Run, near Ceres in Allegany County. According to Fred R. Eaton, of Olean, the whole Cattaraugus band of Senecas moved to the nesting grounds and remained for two weeks to take pigeons. White professionals attended, of course, and their method of stretching and baiting nets is well described; but it does not appear that the Indians used this technique.

"They also invaded the roosts and knocked the squabs from the nests, felling trees so as to shake down hundreds together. In preparing them for shipment their crops were torn out to prevent the breast meat from souring, they were packed in barrels and hurried to the city. Pigeons continued to nest in this locality until 1872." (Eaton, 1910, p. 383; Mann and King, 1896, p. 99.) This business of shipping pigeons was apparently engaged in by both Indians and whites; and thus the Indian techniques were commercialized when squabs were taken for the market.

There were large nestings after this in some years, at least in northwestern Pennsylvania. The flight of 1878 was unusually heavy, accounted for by the professionals—who followed the pigeons wherever they were, east or west—by guessing that the Wisconsin–Michigan flights were following the eastern route that year. Some idea of the extent of the traffic, the movements of the pigeons and the shift of attention from dead to live birds as the weather grew warm may be had from the extracts from *The Warren Mail* for 1878, presented in the Appendix hereto.

The advent of railroads in the pigeon

country—which was also the timber country of northwestern Pennsylvania—brought the eastern markets for both birds and lumber closer and made both more valuable. Public opinion, impressed by the failure of the pigeon flights to materialize annually in such large numbers as formerly, forced legislative protection for the birds on their nesting grounds, in Pennsylvania; and local land owners no longer looked with indifference on the destruction of their trees. It does not appear that much attention was paid to the provisions of the laws made to protect the pigeons themselves. So long as the hunters let the trees alone, there was little interference with them.

Willie Gordon tells how on one occasion officers from the sheriff's office came on horseback to stop the Indians from felling trees. "They said, 'If you Indians cut down any more trees we will arrest you.' Now, old Jesse Logan, Frank Logan's grandfather, who was among us objected. He reminded them of the white people's treaty with Cornplanter which reserved for the Indians of his band the right to hunt, fish, take pigeons, and fell timber wherever they may be in 22 counties of New York and Pennsylvania. One of the party, Jonathan Pierce, returned here to Cornplanter for the treaty papers, but he did not arrive back at the pigeon camp until late the following day, since it was a day's walk each way to the camp in Forest County some way south of Sheffield [see above]. When the officers were shown the papers, they said that if the Indians would leave the big trees so that the timber would be spared and just cut down the smaller ones, this would satisfy them. And so we did this."

Willie says further: "At that time there was a great crowd of Indians, and whites who had come on horseback and in wagons to buy the squabs which we had caught. They were always right there to fill them with squabs. There were traders and merchants, for then the only white settler in that region was a man named Cunningham of whom we bought potatoes that he raised in a small clearing beside his log cabin in which he was continually troubled by marauding bears who came in the night and clawed on the door."

Willie Gordon's Narrative of His First Pigeon Scout

Now, as I have said, when the squabs got so big that they would fly every time the men felled the trees in which they perched, we would have to quit that place and move our camp to another nesting grove. On the occasion of this story, white horsemen had reported a place where the pigeons had gone in great flocks. So then our leaders called a council there to decide among ourselves whether to return home next morning or to continue hunting. The council appointed two scouts: my uncle, the late Charlie Gordon, and Alfred Halftown, to go see if they could locate the reported pigeon roost and to report back to the council. Now I was just a small boy at that time and I wanted to tag along with Uncle Charlie, but he did not want the bother of having me with him for fear that I might get lost in the big woods. But I went anyway. Moreover, I had a double-barrel muzzle-loader shotgun that I carried and a powder horn and various sizes of shot. And so I followed.

We had gone some distance when we commenced to hear a rumbling noise—*mmmmmmm!*: like that. We went on, trying to determine which way the noise came. We were in the big timber—no path, no trail—way back of Sheffield. Then we saw fresh tracks which we thought were the tracks of a panther, *he*^{n}*'iis*. In front of us we could see the passenger pigeons at work on the beechnuts on the ground. When they would fly they would all fly at once, making this great humming noise—*mmmmmmm!* We crossed a little brook where the shores were completely white with feathers of the birds that had bathed there. Here a tree was uprooted and in the upturned earth we could see for certain the tracks of a big panther. We were afraid of that. Now the older ones wanted my gun. Up to that time they had considered me and my double-barrel gun a nuisance—something to stop and wait for. Now at that time I had two shots in there; I had loaded it that morning with fine birdshot.

One of the men took my gun and shot it off and then reloaded it with buckshot, and I had nothing. But we walked on and at last we came to the place where the pigeons had nested. Here we cut down a little tree intending to take some squabs back to camp, as we had been instructed to find the nests and bring some squabs to let the people see their condition. Then the council would decide whether to remove to that place or to return home.

When we were ready to start back each of us had a different idea as to which direction our camp lay. Finally, after much discussion, we decided to take one way, and we walked on and on through the woods, becoming very hungry and thirsty. It was growing late when we saw smoke far off and we decided to go see what it might be, for we thought it might possibly be our own camp. When we at last reached the place where the smoke arose, we discovered that some white people had been camping there. There were

hemlock-bough shanties, and outside a fire was still smouldering. We went inside one shanty and found provisions: there was canned milk—this was the first time I ever saw milk in cans; there was coffee and sugar. So now then we sat down and prepared a meal and so then we ate. After we had had enough, we returned thanks and packed up everything there was left over and carried it with us; and we followed the white men's trail, which at its end came down to the muddy road where it was rutted by the wagons of many pigeon traders driving toward our camp. So at the end of this road that so many people had traveled we found the Indian camp. When we reached camp it was getting dark and the people had gathered to discuss what had become of us. They were afraid that we were lost.

If I ever again hear that there is to be a pigeon hunt I will try and go there. It is the best fun you ever saw. When we get back people will not know us—we will be fat from eating squabs and drinking pigeon-oil. You ought to see how fat those squabs are!

DISAPPEARANCE

Nevertheless none of the old Senecas ever again expect to see the *jäh'gowa* fly north in the spring. Several Cornplanter people told us that they had heard the old folks say those birds tried to cross the ocean and that they had all perished in a storm by drowning, starvation, or exhaustion. However, this is "old hat," as every ornithologist knows. So the "big breads" live now only in the memories of a few old people like Willie Gordon and Lydia Bucktooth. But the young people of Coldspring Longhouse continue to dance the Pigeon Dance, still a favorite social dance among all the Iroquois; and at Tonawanda it is an integral part of the spring Maple Thanksgiving Festival.

Of the numerous reasons advanced by ornithologists to explain the disappearance of the passenger pigeon, adequately treated by Mitchell in her monograph of this species, only those theories entertained by Indians concern us here. The Indians believed that their practice of taking squabs when they were ready to leave the nests was a measure of conservation. By long observation they knew that there were plenty of birds until white competition and attention to the adult birds, shot and persecuted relentlessly with nets and traps, gradually reduced the number and size of the annual nestings, until they disappeared entirely.

The notion that the passenger pigeon was present in great numbers one year and completely gone the next has been proved a popular fallacy. As early as 1660 they had already begun to disappear from the New England coast; and in the Iroquois country of New York and western Pennsylvania, and in Ontario, their disappearance was noticeable by 1850. In 1848 there is record of shipment from Cattaraugus County, in western New York, alone of over 80 tons of the birds. Four years later occurred the last great nesting at Ashford, between the Allegheny and Cattaraugus Senecas. Practically all the squabs, together with a greater portion of the old birds, were captured (Mershon, 1907, p. 122). After the great nestings at Ceres in 1868–72, there is still record of occasionally very heavy flights in northwestern Pennsylvania for the next decade or so. According to Todd, the last attempted nesting of any size in northwestern Pennsylvania was observed in Potter County in 1886. After that only a few birds appeared at Sheffield, the locus of the Cornplanter Seneca hunts, which pretty well dates them. The last passenger pigeon seen in Warren County by one who was competent to identify it was reported by Ralph B. Simpson on the Allegheny near Warren, in company with a flock of mourning doves, May 20, 1893.

No single cause serves to explain the disappearance of the passenger pigeon. Mitchell thinks the immediate cause was the upset of its equilibrium of life in terms of its optimum population density—which was certainly high—to which the increasing disturbance of its nesting contributed. All authorities seem agreed that the culprits in this process were the market hunters who destroyed the annual crop of squabs by raiding the nests and substantially reduced the size of the adult flocks by netting and shooting. Clearing the land was detrimental of course; but as the forests have survived the pigeons, this alone will not account for their extinction. Diseases introduced along with domestic poultry may have taken some toll; but their effect could be only inconsiderable as compared with that of man's destruction of the species. The market hunters

found a ready explanation for what happened in a legend that persists, as we have seen, as a tradition among the Senecas: The theory that a cyclonic disturbance on the sea drowned the birds in great numbers. Kalm advanced it in 1740 (1759), and the story has been cropping up in one form or another ever since.

It is certain, therefore, that the passenger pigeon's disappearance can not be attributed to natural enemies, or to the Indian. Forbush, who gave this problem some thought, pointed out that for the years that pigeons were most abundant its natural enemies were most numerous; and that its extinction is coincident with the disappearance of bears, panthers, wolves, lynxes, and birds of prey. Forbush says:

> The aborigines never could have reduced appreciably the number of the species. Wherever the great roosts were established, Indians always gathered in large numbers. This, according to their traditions, had been the custom among them from time immemorial. They always had slaughtered these birds, *young and old*, in great quantities; but there was no market among the Indians, and the only way in which they could preserve the meat for future use was by drying or smoking the breasts. They cured large quantities in this way. Also, they were accustomed to kill great quantities of the squabs in order to try out the fat, which was used as butter is used by the whites. (Forbush, 1936, p. 41; cf. 1927, vol. 2, p. 59. Italics added.)

At least two authorities have argued that all that is required to bring about the extinction of a species is to kill off a large proportion of its offspring each year before they reach maturity. Nature cuts off the rest. (Forbush, 1936, p. 44; Townsend, 1932, p. 382.) The Indian practice of taking only the young birds and leaving the breeding stock which they considered a measure of conservation became a means of extinction when employed by professional pigeoners.

Dr. Alexander Wetmore, who has read this manuscript, offers another explanation: "As one matter of biological import there is little question in my mind that but one egg was the normal complement in the set of this species. Occasionally two eggs were found, but where this occurred it is my opinion that the second egg came from a female other than the rightful owner of the nest. It is not unusual for birds of this type to lay an occasional random egg in this way. The fact that the birds normally reared only one young per season is enough to account for their disappearance under the heavy persecution to which they were subjected by commercial trappers and hunters, since no species can stand such a toll with a rate of reproduction that requires at least two years to reproduce the original pair (A. Wetmore, p.c., 11/9/1942)."

In any event, the commercial hunter was the principal factor in the extinction of this species.

HISTORICAL CONSIDERATIONS

Value as Food to the Seneca Indians

The question naturally arises as to how important was the passenger pigeon as food in the diet of the Seneca Indians. We have already seen that the neighboring Cayuga and Onondaga netted pigeons at salt licks and on bluffs, and we have presented a number of early and modern records of huge nestings that were attended by whole bands of Senecas and segments of the aforementioned tribes. Presumably for several weeks between maple harvest and planting season, when the pigeons nested, the Seneca settlements were more or less evacuated while the population concentrated at the nesting grounds to take squabs and smoke them for transportation home. Great quantities were consumed on the grounds; all informants testify how fat they became. During this period, and for some weeks thereafter, squabs constituted the bulk of their diet. In fact, one wonders whether the Indians must not have become as fed up with eating pigeon and drinking pigeon broth as did the pioneers of Canada (Mitchell, pp. 106–107). However, with the Indians, their ceremonies at hunting suggest that the pigeons very often came in time to relieve starvation. At this season the Iroquois were often reduced to eating their seed corn. In good years there were squabs aplenty to keep the Senecas, and all the Iroquois for that matter, through the planting season—particularly if one can accept as typical such nestings as the one observed by John Lyman, an early settler. He says it extended 100 miles along

the Upper Allegheny in late May and early June of 1805, and again in 1810 (French, 1919, pp. 23–25).

Prehistoric Evidence

Before the white man settled in America, ancestors of the Iroquoian peoples took passenger pigeons and presumably ate them. Bones of adult birds are common among the bird remains from refuse heaps of precontact village sites in the Iroquoian area. It seems reasonable to assume that these early peoples preferred the squabs to adult birds, as did their descendants. Moreover, since the bones in young birds are not completely ossified until the fledglings leave the nest, and remembering that it was the practice to take the squabs just before they left the nests, it follows that if, as we suspect, prehistoric Iroquoians took great quantities of squabs and ate them on the grounds, squab bones—if they survived at all—would not be represented in the village site remains. This fact may account for the dearth of reports on this species for New York State Iroquois sites. (However, absence of data may also reflect careless archeological technique. Pigeon bones are small.)

In the refuse heaps of two prehistoric sites within the historic area of the Neutral tribe (Niagara Peninsula), reported by Wintemberg on identifications by A. Wetmore (U. S. National Museum), passenger pigeon bones are dominant among the bird remains at Uren, while at Lawson village site the passenger pigeon is the third ranking bird (in their diet) after turkey and ruffed grouse. But the numbers of mammal bones were by far in the majority.[9]

At Roebuck, a prehistoric Mohawk-Onondaga site in the St. Lawrence Valley, again mammal bones were most abundant, and bird bones were not numerous. Of 13 species of birds reported, the passenger pigeon was sixth in order of frequency (Wintemberg, 1936, p. 14). While these figures are suggestive, they remain inconclusive without comparable statistics from prehistoric Seneca sites in western New York.

Comparative Notes

From the fragmentary archeological evidence we turn to some comparisons of passenger pigeon hunting among other historic eastern woodland tribes whose territories were traversed by these migratory creatures. To know that neighboring tribes followed the annual pigeon nestings, observed similar customs and utilized hunting techniques identical with those of the Senecas would strengthen the case for the aboriginality of the Seneca activity. The Seneca material assumes proper perspective in such a comparison; and, other things being equal, what we have been able to establish for Seneca passenger pigeon hunting illuminates references to other tribes, broadening our view of the relation of man to his natural environment in eastern America.

Passenger pigeons nested in eastern Massachusetts and were relatively abundant throughout New England until nesting began within fifty years of white settlement. The early nestings at Essex, near the coast, were only 30 miles from the white settlements; Wood (1629–34) describes a nesting colony that filled a great pinery, "from whence the Indians fetch whole loades of them" (Wood, 1865, *in* Forbush, 1927, vol. 2, p. 59). Wood does not say that Indians trapped adult birds. The inference is that they took the squabs from the nests. *Wuskówhan* is given by Roger Williams (1643) as the Algonquian word for "pigeon"; of which Cotton Mather writes, "Or Indians call these *Pigeons,* by a name that signifies *Wanderers*" (Schorger, 1938, p. 474). Mather's statements are probably of Natick origin. They are a tribute to the keenness of Indian observation on the habits of birds, but they contain no information regarding the Indians in relation to the pigeons other than the apparent fact that Mather met them, toó, at a salt marsh. Williams, however, observes: "In the 'Pigeon Countrie' [which Trumbull assigns to the northern part of Nipmuck territory, now Worcester, Mass.; then occupied by a

[9] Wintemberg, 1928, p. 5; 1939, p. 9. In the Lawson prehistoric village site in Middlesex County, Ontario, of 11,000 animal bones, the majority (10,000) were of mammals; second in rank were 186 bird bones, "in order of their abundance: wild turkey, ruffed grouse, Passenger Pigeon, Canada goose . . . "

Acknowledgement is made to Dr. Alexander Wetmore, who made the identifications, for the opportunity to discuss these matters with him.

little band called 'furthermost Neepnet men,' next neighbors to the Showatucks] . . . these Fowls breed abundantly, and by reason of their delicate Food (especially in Strawberrie time when they pick up whole fields of the old grounds of the *Natives*, they are a delicate fowle, and because of their abundance, and the facility of killing them, they are and may be plentifully fed on." (Williams, 1866, p. 116.)

As in New England, the passenger pigeon receded from the coast of New York and New Jersey with the Indians. It may be inferred from the following accounts that the coastal Algonquians, the aborigines of New Netherland, once took these birds in much the same manner as the Iroquois. In "Description of New Netherlands, 1671," it is said by Montanus that fowls, turkeys, geese, ducks, pigeons and other feather game are also easily obtained. "The pigeons fly in such flocks that the Indians designedly remove to their breeding places, where the *young* birds *pushed* by hundreds from their nests, serve for food during a long month for the whole family" (Montanus, p. 123).

We do not find accounts of the early Delaware hunting them, but it is reported that their annual custom of burning the woods in hunting deer "kept the woods clean, so that pigeons readily got acorns, which then not being devour'd by hogs, were plenty almost everywhere." (Samuel Smith, 1890, p. 511.) However, for the eighteenth century David Zeisberger, writing of the Delaware of whom many had accompanied him from eastern Pennsylvania to the present site of New Philadelphia, Ohio, in the years 1779 and 1780, says:

> The wild pigeon is of an ash-gray color, the male being distinguished by a red breast. In some years in fall, or even in spring, they flock together in such numbers that the air is darkened by their flight. Three years ago (i.e. 1776 or 1777) they appeared in such great numbers that the ground under their roosting place was covered with their dung above a foot high, during one night. The Indians went out, killed them with sticks and came home loaded. At such a time the noise the pigeons make is such that it is difficult for people near them to hear or understand each other. They do not always gather in such numbers in one place, often scattering over the great forests. (Zeisberger, 1910, p. 66.)

He is speaking here of pigeon hunting on the fall return-flight, when the pigeons nested for only *one night;* and these must have been old birds that his tame Indians *knocked* out of their nests. These Indians had guns. It is curious that Zeisberger, who lived for three years in the pigeon-nesting country near Tionesta, Pa., says very little about pigeons during this period.

The process of taking squabs and melting down the fat for domestic purposes as a substitute for butter and lard is reported as a general practice among Indians and many whites: tribes are not specified (Wilson, 1812, vol. 5, p. 107). In Virginia the early settlers took pigeons in winter. John Lawson (1709) speaks of prodigious flocks of pigeons during 1701–1702; and of the Indians of Carolina he writes: "You may find several Indian towns of not above seventeen houses, that have more than one hundred gallons of pigeon's oil or fat; they using it with pulse or bread as we do butter, . . . the Indians take a light and go among them in the night and bring away some thousands, killing them with long poles, as they roost in the trees" (Lawson, 1860, pp. 78–79).

This seems to be the only specific reference for the Southeast, and one can not estimate to how many tribes it applies. Westward in Tennessee we lack eye-witness accounts of the Chickasaws taking pigeons; but within 50 miles of Memphis, Lusher's map of 1835 specifies "Pigeon Roost Creek" which Myer says was also the name of the short-cut trail or "Pigeon Roost Road," leading between the home of the Chickasaws in northern Mississippi and the Chickasaw Bluffs. Here there were vast roosts in heavily timbered bottoms, which must have been famous far and wide, as they are remembered in place names. Myer thinks they were known to the Chickasaw and were the probable reason for the trail (Myer, 1928, pp. 817–819).

To the north in the Great Lakes area, the Siouan-speaking Winnebago of Wisconsin poked pigeons out of their nests with long poles after the manner of Lawson's Indians of Carolina. They considered pigeons their "chief" birds, and hunts were undertaken in season when the chief decided to give a

feast. They were prepared by broiling or steeping and had a delicious taste. Large quantities were taken after storms when many died of exposure (Radin, 1923, pp. 112–113).

It is among the Potawatomi of Michigan, however, that we find the closest approximation to Seneca pigeon hunting. In Chief Simon Pokagon's classic portrayal of the Michigan nestings, which Forbush has called the best description of the nesting of these birds, the Potawatomi techniques are those of the Seneca. He says: "A pigeon nesting was always a source of revenue to our people. Whole tribes would wigwam in the brooding place. They seldom killed the old birds, but made great preparation to secure their young, out of which the squaws made squab butter and smoked and dried them by thousands for future use. Yet, under our manner of securing them, they continued to increase."[10]

The Ottawa ate pigeons (Kinietz, 1940, p. 240), but we find no details as to their methods of hunting them.

SUMMARY AND CONCLUSIONS

Once more we have seen the reminiscences of a few old Senecas, bolstered by historical fact, grow into a study of monographic proportion. As usual, Seneca tradition clarifies some points on which history is silent, while recorded history serves to date the disappearance of one more activity that old Senecas recall as being formerly part of their yearly economic cycle. In the case of pigeon hunting most of our materials come from members of the Cornplanter Band of Senecas in northwestern Pennsylvania. These people have been generally disregarded by ethnologists because they have been so long acculturated to white ways, but the authors of this paper have long suspected that the Cornplanter people could still yield information on material culture of hunting, with which they are still preoccupied. In the present study of the last passenger pigeon hunts of the Cornplanters, Willie Gordon and others have contributed to the increase of the literature on this extinct species. During the last years of their annual migration to the pigeon roosts around Sheffield and Byromtown, in Warren and Forest Counties, Pa., the Cornplanter people came into contact with the professional white pigeoners at the climax of their activities in the late 1870's. After this, the birds for the most part disappeared under the relentless persecution of the professional netter.

While it is apparent that from early times the Iroquois—notably the Onondaga and Cayuga—set nets for pigeons, both stationary nets on high places and trip nets at salt licks, nest-raiding seems to have been the predominant hunting technique among the Iroquois. This was certainly true of the Seneca, who seem to have used no nets except when they hired out to white pigeoners, as was true of the Indians of Massachusetts, New Netherland, Carolina, Wisconsin and Michigan. In aboriginal times squabs were generally considered more palatable than adult birds, and the pigeon roostings offered such abundant store of provender—both meat and oil—for the taking, that netting and archery, mainly effective with adult birds, were of secondary importance. There was no market for the adult birds, then, as trade was undeveloped. Nor does there seem to have been any sport in Indian life akin to trap-shooting.

The Iroquois regarded the annual return of the passenger pigeon as one of the blessings ordained by the Master of Life. The sudden arrival of great flocks of birds to nest in the neighboring forests not only relieved the economic strain at a period when they were sometimes reduced to eating their seed corn, but also justified their faith in the bounties of nature. For this great blessing they were duly thankful, and they prayed that this condition might continue always. They allowed the birds to nest and to hatch their young; and the nests were not disturbed until the young were ready to leave. They believed that the practice of taking squabs at their prime and of allowing the adult birds to go free to reproduce the species was a measure of conservation, which was probably true under the circumstances. Our Seneca informants were shocked at the way professional pigeoners violated nature

[10] Chief Simon Pokagon, from The Chautauquan 22 (20). Nov. 1895; *in* Mershon, 1907, p. 54.

by indiscriminate slaughter of old and young birds alike and by the relentless pursuit of the flocks from place to place.

The Iroquois ascribed human traits to the animal and plant world. It is small wonder that the folklore of these people observes that the passenger pigeons were the one bird that congregated in communal settlements like Indian villages, and that folk-tales ascribe to the pigeon colonies a humanlike society. An albino pigeon as chief fulfills the role of the sacred white animal, a common belief among woodland Indians. In a mythological encounter, the culture hero, a pure youth, meets the sacred white pigeon during a vision and enters into a compact with him. Rules are established governing the conduct of the hunt and the taking of squabs. These data cover such details as the *master of the hunt* who as in later times orders the migration, keeps the crowd together, places a "pole across the path at night"; keeps separate the camps for maternal kindred. Even the construction of lean-tos is covered. Continuing the pattern for Iroquois origin legends, the myth provides the rationale for ceremonies attending the hunts of later years: the camp caller, morning and evening thanksgiving, a ceremony for propitiating the pigeons with an offering of trinkets and sacred tobacco which—as always in Iroquois ceremonialism—is the intermediary between man and the spirit-world. Moreover, we find here an origin legend for the Pigeon Dance of later Iroquois ceremony; and its tenuous connection with the Maple Thanksgiving Festival is strengthened by the fact that pigeon hunting followed soon after the sugaring and lasted well into planting time. The youth relates his vision to the clan chiefs who carry out his contract; they call a council of the people to learn the new dance. Two dance leaders precede the whirling column, and an explanatory element about the counter-clockwise movement of social dancers represents the projection of a modern usage into ancient times.

Whether Indians or whites originated the pigeon-netting techniques is a question that can not be resolved entirely. The "nettings" at the Syracuse salt licks and westward into the Cayuga country may not have been the same as the techniques of the professional netters. On the contrary, the complicated set-nets of the white pigeoner, with their weights, releasing poles, stool pigeons, decoy baskets, etc., seem to have emanated from southern Europe. They were used in New England as early as 1660.

We have shown that the Indian method involved knocking the young out of the nests with long poles or cutting down the trees to get at them. We must accept the Seneca testimony that they used European devices when assisting white pigeoners, for the Iroquois knew other types of traps, and it was not beyond their abilities to devise adequate bird-trapping devices had they so desired, or had they any interest in taking the adult birds. There is a possibility that there was some trade latterly in splint decoy baskets of the type Indians sometimes make, but the specimens examined do not appear to have been made by any of the Indian tribes of the northeast.

Willie Gordon's narrative of his first pigeon hunt, from which this study sprang, is a tale of the late period of acculturation, of course. It represents the best of the last shreds of Cornplanter Seneca ethnology, which can be made to serve a useful purpose in reconstruction.

We have said something of the disappearance of the passenger pigeon, principally because the last nestings in Pennsylvania were in the area under study and to show that the stock explanation given by the Indians, and by many whites, is only a bit of recurrent folklore. The Seneca by themselves could not and would not have depleted this species.

Finally, it may be said that the passenger pigeon had a definite place in the hunting economy of the Iroquoian tribes from very early times. This is indicated by the evidence of archeology in the area. Although the accounts of pigeon hunting among the other northeastern tribes from New England south to the Carolinas are fragmentary, we believe that the material we have collected for the Senecas is probably fairly typical of other tribes throughout the range of the passenger pigeon. At least, the evidence in the way of comparative distribution, fragmentary as it is, does not reveal

much cultural diversity in hunting this species, from tribe to tribe. Perhaps this is obvious: there were limitations to ways of killing squabs.

APPENDIX

The discovery of oil in territory near and in the pigeon country in the 1860's was naturally attended by very rapid extension of railroads all through this area. The increased slaughter of wild pigeons, especially by professionals who came from all over the country attracted by the market facilities provided by the better transportation, was attended by a decline in the size and number of pigeon flights. By the Acts of May 1, 1873, and of May 1, 1876, Pennsylvania attempted to protect the birds, using the theory that disturbance of adults on their "roostings" was the cause of the trouble. This was not effective; so the Act of June 10, 1881, extended protection specifically to the squabs, banning the taking of any birds, young or old, with gun, net, or trap within a mile of the nesting grounds. A heavy license fee of $50 was to be collected by each county in which the trapper worked.

During this period *The Warren Mail*, a weekly paper in the largest town near the pigeon grounds, was edited by an honest, high-minded gentleman greatly interested in law enforcement. His paper makes only casual mention of pigeons before 1878. The flight of that year was heavy, attended by large numbers of professionals from everywhere who paid no attention to the laws—and by a rising of the editor's dander on account of this. For us the result is an unusually good account of what went on in the pigeon woods. We extract from the *Mail's* weekly reports enough to give some idea of the extent and character of these activities.

Mar. 18, 1878: "Pigeons were seen flying over town last Thursday morning [i.e., Mar. 7]. Too high for shooting."

Mar. 19, 1878: "Pigeons are feeding and flying around Warren and the shot-gun squad are wide awake."

Mar. 25, 1878: "The pigeons have been flying in large flocks in this section for several days. They are reported as nesting in the wild woods of Forest County, beyond Sheffield. Numerous pigeon catchers are at Sheffield, Kane, Tidioute, Tionesta and all along the line. Last week nearly 100 barrels of dead birds were shipped from Sheffield. At this rate the pigeons will soon be exterminated."

Same issue: Quotes from the *Tionesta* [*Forest County*] *Republican* to the effect that "Sheffield is the shipping point for large quantities of pigeons. A small army of men are trapping them at their roosting and feeding places in Forest Co. It is alleged that large numbers have been shot near their roosting places, which act is contrary to law. In 3 days last week about 50,000 pigeons were shipped."

Same issue: Again quoting the *Tionesta Republican:* "The pigeon trappers are not doing very big business here, we believe, owing to the difficulty they experience in keeping spectators and hunters at a sufficient distance from their base of operations as not to scare the birds. The gang up about Balltown [up the Tionesta Creek, below Blue Jay mouth], however, are scooping them in at a great rate. They took 80 dozen in 2 days. They ship them to Sheffield for New York where, we hear, they sell for $3 per dozen."

April 4, 1878: "The pigeons shipped to N. Y. from Warren and Forest Counties are sold at $2.00 a dozen."

April 23, 1878: "Up to last Saturday [the 20th] 291,741 pigeons had been shipped from Sheffield. Probably nearly as many have gone from Tionesta while some 40,000 have been shipped from Tidioute. Over half a million birds have been caught, for which probably $75,000 were received. Who says this 'neck of the woods' is not productive?"

April 30, 1878: "Mr. Gemmill [the freight agent at Sheffield] informs us that the total number of birds shipped from Sheffield up to April 27 is 353,846. Lately, the price of dead birds is low and 14,600 live ones were shipped during the last week. Counting 50,000 from Tionesta and 40,000 from Tidioute, which is no doubt below the actual figure, we have 443,846. Some have been shipped from Kane and other points while many have been carried away by shootists. It is probably safe to say that 500,000 birds, dead or alive, have been taken in this section."

May 14, 1878: "The number of pigeons, dead and alive, shipped from Sheffield up to and including Monday, May 13, is 505,516! So says Mr. Gemmill, the freight agent, who has the exact number. They are still nesting in the woods of Forest County. The pigeon men say the Michigan birds have come to this 'neck of the woods'."

May 28, 1878: Quoting the *Tionesta Republican:* "Davy Hilands shipped 500 pigeons to N. Y. this morning—the first that have been shipped from this station for some time. The trappers are now operating near Brookston and also about Kane and altogether the pigeons get no rest at all."

June 11, 1878: "Pigeons are still being shipped from Sheffield. Up to last Monday over 700,000 pigeons have been shipped and 200,000 from Kane Mr. Gemmill tells us that there are over 2,000

dozen pigeons in coops awaiting shipment. They are now nesting up Kinzua Creek on Chapel Fork."

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